

WHAT IS CLAIMED IS:

1. A mold with form keys for forming a reverse draft in a thermoformed part, comprising:

a mold, said mold including a male plug, said male plug including a female form key and an first fluid driven actuator for actuating said female form key,
said mold including a female cavity, said female cavity including a male form key and a second fluid driven actuator for actuating said male form key.

2. The mold claimed in claim 1 further comprising a first source of fluid in communication with said first fluid driven actuator for actuating said female form key toward said male form key, said first source of fluid in communication with said second fluid driven actuator for actuating said male form key toward said female form key.

3. The mold claimed in claim 1 further comprising a timer for retracting said first and second fluid driven actuators upon a predetermined period of time after actuation of said first and second fluid driven actuators.

4. The mold claimed in claim 1 wherein said first and second fluid driven actuators are pneumatic.

5. The mold claimed in claim 1 wherein said first and second fluid driven actuators are hydraulic.

6. A mold for thermoforming undercuts into foam parts, comprising:
a male plug, said male plug includes a female form key moveably mounted thereon, and a first fluid actuated piston connected to said female form key for moving said female form key relative to said male plug, and

a female cavity, said female cavity includes a male form key moveably mounted thereon, and a second fluid actuated piston connected to said male form key for moving said male form key relative to said female cavity and toward said female form key.

7. The mold claimed in claim 6 further comprising a source of pressurized fluid in communication with said first and second fluid actuated pistons, and a valve and a timer for controlling communication between said source and said first and second fluid actuated pistons.

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8. A method of forming a reverse draft in a thermoformed foam part, comprising the steps of:

providing a mold with a male plug, and a female cavity,

providing said male plug with a female form key moveably mounted on said male

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plug,

providing a first fluid driven actuator for moving said female form key,

providing a second fluid driven actuator for moving said male form key,

closing said male plug and said female cavity on a foam sheet,

communicating pressurized fluid to said first and second fluid driven actuators to

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move said male form key and said female form key toward each other,

engaging said foam sheet with said female form key and said male form key to

form a reverse draft in said foam sheet,

withdrawing said female form key and said male form key from said foam sheet,

and

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opening said male plug and said female cavity.

9. The method of forming a reverse draft in a thermoformed foam part claimed in claim 8 further comprising:

stripping said foam sheet with said reverse draft from said mold.

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10. The method of forming a reverse draft in a thermoformed foam part claimed in claim 8 wherein said first and second fluid driven actuators each includes a piston with a first side and a second side and said step of communicating pressurized fluid comprises communicating pressurized fluid to said first side of said pistons of said first and second fluid driven actuators and venting said second side of said pistons.

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11. The method of forming a reverse draft in a thermoformed foam part claimed in claim 8 wherein said first and second fluid driven actuators each includes a piston with a first side and a second side and said step of withdrawing said female form key and said male form key comprises communicating pressurized fluid to said second
5 sides of said pistons and venting said first sides of said pistons.

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